

Landforms in a Tub

Summary

Students will use common household items to build landforms and simulate weathering and erosion.

Materials

- Small plastic wading pool
- Two 5-gallon buckets of sand
- Bicycle pump/needle/ deflated playground ball
- Garden water can
- Five gallons of water and a tray of ice cubes
- Hair dryer

Additional Resources

Books

- *Mountain Dance*
, by Thomas Locker; ISBN 0-15-202622-3
- *The Usborne Encyclopedia of Planet Earth*
, by Anna Claybourne; ISBN 1580862608
- *Earthquakes and Volcanoes (Understanding Geography Series)*
, by F. Watt; ISBN 0-88110-592-9
- *Earthdance*
, by Cynthia Pratt Nicolson; ISBN 1-55074-155-1
- *Icebergs and Glaciers*
, by Seymour Simon; ISBN 0-688-16705-5
- *Mountains*
, by Seymour Simon; ISBN 0-688-15477-8

Videos

- *Eyewitness Volcano*
, (DK Publishing, available from Amazon.com); ASIN: 6304165323
- *Earth's Crust*
, by Bill Nye (Disney Educational Productions, 1-800-295-5010,
<http://dep.disney.go.com/educational/index>); VHS Product ID: 68A51VL00, DVD Product ID: 77A09VL00

Background for Teachers

Earth is alive and in constant motion. The shape of the land is constantly being changed by weathering and erosion. Weathering causes rocks to fragment, crack, crumble, or break down chemically, biologically, and physically. Erosion loosens and carries away rock, debris, and soil.

Intended Learning Outcomes

1. Use Science Process and Thinking Skills
2. Manifest Scientific Attitudes and Interests
3. Understand Science Concepts and Principles

Instructional Procedures

Invitation to Learn

Read *Mountain Dance* by Thomas Locker.

Instructional Procedures

Divide into groups. Explain to students that they need to build an Earth model in the sand with landforms from high mountains all the way to sea level, including a river, a lake, and a valley.

Use pictures of landforms and build landforms.

Use ice cubes to form a glacier on the side of the mountain. It may be beneficial to have students build at least two mountains for comparisons.

Add "rain" with a garden water can.

Record observations in a science journal.

Inflate a playground ball and place beneath the pool. Observe and record account of uplift in a science journal.

Use a hair dryer to simulate wind.

Create a book using terms and drawings learned in activities. Stress use of science language.

Extensions

Find pictures in magazines and books of similar landforms.

Forms may be built in the school's playground sandbox.

Family Connections

Share books.

Read books to a younger child.

Quiz parents.

Assessment Plan

Grade books using [Science Writing Rubric](#).

Orally quiz students on landforms.

Authors

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